

IN THE CLAIMS

Please cancel claim 1.

Please amend claims 2, 4 and 8 as follows:

a1 2. (Amended) The lead-free solder comprising an alloy composition containing 2.0 to 5.0% by mass of silver, 0.01 to 2.0% by mass of copper, and 0.002 to 0.015% by mass of phosphorus with the balance consisting of tin.

a2 4. (Amended) A connection lead comprising: a copper strip or other strip conductor; and a plating provided on at least one side of the strip conductor, said plating being formed of a lead-free solder composed mainly of tin, said plating containing 0.002 to 0.015% by mass of phosphorus, 2.0 to 5.0% by mass of silver, 0.01 to 2.0% by mass of copper, with the balance consisting of tin, and having a shape such that the plating in a widthwise direction of the strip conductor has a bulge as viewed in section with an apex being located at a proper position in the widthwise direction of the strip conductor.

a3 8. (Amended) An electrical component structure comprising a connection element formed of a lead-free solder composed mainly of tin, said connection element containing 0.002 to 0.15% by mass of phosphorus, 2.0 to 5.0% by mass of silver, 0.01 to 2.0% by mass of copper, with the balance consisting of tin.

Please add the following new claims 14-17:

a4 14. The lead free solder according to claim 2, wherein:
the alloy composition excludes bismuth.

15. An alloy composition for a lead free solder, comprising:

0.002 to 0.015% by mass of phosphorus;

2.0 to 5.0% by mass of silver;

0.01 to 2.0% by mass of copper; and

tin.

ay 16. The alloy composition according to claim 15, wherein the tin forms the balance of the composition.

17. An alloy composition for a lead free solder, consisting essentially of:

0.002 to 0.015% by mass of phosphorus;

2.0 to 5.0% by mass of silver;

0.01 to 2.0% by mass of copper; and

tin.
